

Please provide the following information, and submit to the NOAA DM Plan Repository.

Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

1. General Description of Data to be Managed**1.1. Name of the Data, data collection Project, or data-producing Program:**

Gulf of Maine Cooperative Bottom Longline Survey Database

1.2. Summary description of the data:

This database is for a bottom longline (fixed gear) survey executed in the western and central Gulf of Maine targeting complex rocky habitats. The survey is operated from collaborating commercial fishing vessels, and deploys 1 nm sets of traditional 'tub trawl' bottom longline groundfish gear (1000 hooks). Longline gear is deployed at randomly selected stations within selected NEFSC bottom trawl survey (BTS) strata in the western and central Gulf of Maine during the spring and autumn, overlapping temporally with the NEFSC seasonal BTS in that region. Specific 'hard' and 'smooth' bottom sub-strata were chosen within the BTS strata based on predictive habitat maps that have identified complex habitat at a spatial resolution of @1.3km² (Manderson et al. 2011). The total number of longline stations are allocated by the overall area of each stratum, as done in the NEFSC BTS, and stations randomly distributed in the 'hard' and 'smooth' sub-stratum within each stratum. Each set is made for 2 hours, with gear deployed 1 hour prior to the estimated time for slack tide at that location. The ambient current is monitored with an instrument with an accelerometer (also equipped with a compass and thermometer), which is attached to the mainline on each end of the longline (by the last hook). Temperature-depth probes are deployed on the anchor at each end of the longline. Catch weights, fish lengths, and other biological data are collected for all species following standard survey protocols. Biological sampling (for age and reproductive data) is collected for a subset of species and sizes relative to the BTS's request protocols to fill in data on uncommon species, and less common sizes (i.e. larger individuals) of key groundfish.

The objective of this survey is to provide important information for several species that are not well sampled in BTS or those that are not caught in substantive numbers (targeted) by commercial or recreational fisheries to inform management, Endangered Species Act (ESA) listing decisions, and conservation plan measures. These include cusk, which is a candidate species under the ESA and a data poor stock, as well as Atlantic Wolffish, Atlantic Halibut, and Thorny Skate, which are all NOAA Species of Concern. This survey is designed to increase sampling opportunities for all of these species. Catch

and biological data from this survey provides useful supplemental data and indices for other groundfish including white hake, barndoor skate, red hake, spiny dogfish, haddock, Atlantic cod, and smooth skate.

1.3. Is this a one-time data collection, or an ongoing series of measurements?

Ongoing series of measurements

1.4. Actual or planned temporal coverage of the data:

2014-04 to Present

1.5. Actual or planned geographic coverage of the data:

W: -70.5602, E: -67.60223, N: 43.27977, S: 42.09656

Central and western Gulf of Maine in U.S. territorial waters. Bottom trawl survey offshore strata: 0126, 0127, 0128, 0129, 0136, 0137

1.6. Type(s) of data:

(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)

Table (digital)

1.7. Data collection method(s):

(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

Instrument: Lat37 950w FMB (wireless fish board) and an Allegro AMX-3 field PC (see also technical environment). GPS and transducer data are recorded from the commercial vessels' systems and differ between vessels. Those data are recorded on Dell latitude e5430 Laptops. Merel 1100 series 150kg and 6kg max capacity scales. Star Oddi temperature-depth sensors deployed in aluminum housings on each anchor. Seahorse tilt current meter in a positively buoyant pvc housing clipped to the longline gear.

Platform: Contracted commercial fishing vessels

Physical Collection / Fishing Gear: Tub-trawl (fixed gangion) bottom longline 1 nm in length with 1/4 inch braided mainline. There are 1,000 VMC 12/0 hooks on 15 inch gangions (#550 green line) spaced at 6 ft intervals, which are braided onto the mainline. One gear set is composed of 4 totes/tubs of gear (250 hooks each). The gear is anchored at both ends and has a polyball and highflier at the surface attached to the anchors at each end by a length of buoy line appropriate to the depth and sea state.

1.8. If data are from a NOAA Observing System of Record, indicate name of system:

1.8.1. If data are from another observing system, please specify:

2. Point of Contact for this Data Management Plan (author or maintainer)

2.1. Name:

W. David McElroy

2.2. Title:

Metadata Contact

2.3. Affiliation or facility:

Northeast Fisheries Science Center

2.4. E-mail address:

dave.mcelroy@noaa.gov

2.5. Phone number:

508-495-2249

3. Responsible Party for Data Management

Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

3.1. Name:

W. David McElroy

3.2. Title:

Data Steward

4. Resources

Programs must identify resources within their own budget for managing the data they produce.

4.1. Have resources for management of these data been identified?

Yes

4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):

Unknown

5. Data Lineage and Quality

NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible

(describe or provide URL of description):

Lineage Statement:

The survey data began to be collected in the field in April 2014. A dedicated database began to be designed for storing the data starting in fall 2014.

5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:

5.2. Quality control procedures employed (describe or provide URL of description):

Hand entered data is confirmed while on the vessel and secondarily in post cruise processing. Limited data auditing procedures are available while at sea. Standardized data auditing to identify erroneous entries or extreme values are conducted during post cruise processing and import of data. Morphometric data are checked against standard species specific regressions. Some unique data types still have auditing procedures under development (e.g. current data).

6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

6.1. Does metadata comply with EDMC Data Documentation directive?

Yes

6.1.1. If metadata are non-existent or non-compliant, please explain:

6.2. Name of organization or facility providing metadata hosting:

NMFS Office of Science and Technology

6.2.1. If service is needed for metadata hosting, please indicate:

6.3. URL of metadata folder or data catalog, if known:

<https://inport.nmfs.noaa.gov/inport/item/27731>

6.4. Process for producing and maintaining metadata

(describe or provide URL of description):

Metadata produced and maintained in accordance with the NMFS Data Documentation Procedural Directive: <https://inport.nmfs.noaa.gov/inport/downloads/data-documentation-procedural-directive.pdf>

7. Data Access

NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive?

Yes

7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

7.2. Name of organization of facility providing data access:

Northeast Fisheries Science Center

7.2.1. If data hosting service is needed, please indicate:

7.2.2. URL of data access service, if known:

<ftp://ftp.nefsc.noaa.gov/>

7.3. Data access methods or services offered:

NEFSC Data Access Procedure:

1. Formal request in writing usually to the data owner/contact or Center Director;
2. Requester is contacted by data owner to review and verify the request content and details for data delivery options.
3. If data is confidential then owner will determine if the data may be released to the requester;
4. If data can be released, the data is downloaded and packaged for delivery electronically; or the requester may be directed to where the data is available online.

7.4. Approximate delay between data collection and dissemination:

A few weeks to 6-9 months dependent on the data type and end users need. For some of the unusual data types the tables are still being designed, therefore these data remain incompletely available.

7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

8.1. Actual or planned long-term data archive location:

(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)

To Be Determined

8.1.1. If World Data Center or Other, specify:

8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:

Data will be archived once a solution for archiving relational data sets is defined

8.2. Data storage facility prior to being sent to an archive facility (if any):

NEFSC Woods Hole Lab - Woods Hole, MA

8.3. Approximate delay between data collection and submission to an archive facility:

Unknown

8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

Archival of source data preserving unaltered collected data, Scheduled backups, Remote storage backups, Password protection

9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.